Message

From: Strynar, Mark [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5A9910D5B38E471497BD875FD329A20A-STRYNAR, MARK]
Sent: 6/15/2017 7:36:13 PM
To: Orme-Zavaleta, Jennifer [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3c5a111dc377411595e5b24b5d96146b-Orme-Zavaleta, Jennifer]
Subject: RE: Some GenX info

You are welcome.

From: Orme-Zavaleta, Jennifer
Sent: Thursday, June 15, 2017 3:34 PM
To: Strynar, Mark <Strynar.Mark@epa.gov>
Subject: RE: Some GenX info

Thanks Mark

Jennifer Orme-Zavaleta, PhD
Director, National Exposure Research Laboratory
USEPA Office of Research and Development
109 TW Alexander Dr MC 305-01
RTP, NC 27711

Personal Phone / Ex. 6

orme-zavaleta.jennifer@epa.gov

From: Strynar, Mark
Sent: Thursday, June 15, 2017 3:33 PM
To: Orme-Zavaleta, Jennifer <Orme-Zavaleta.Jennifer@epa.gov>; Guiseppi-Elie, Annette <Guiseppi-Elie.Annette@epa.gov>
Cc: Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>
Subject: Some GenX info

Jennifer please pass on to those on the call. You can find info on each of these compounds on the US EPA Comptox Chemistry Dashboard.

All,

1) Per the attached non-CBI GenX brochure (attached) from DuPont the compound being called GenX is the processing aid with the structural formula $CF_3CF_2CF_2OCF(CF_3)COOH.NH_3$

This is the ammonium salt of the processing aid. This is much like PFOA can exist as the free anion (PFO-) or as the ammonium salt (APFO). As these will both exist as the anionic form in water, they cannot be measured separately. Mant other PFAS exist in salt forms as well for usiage but as anions when analyzed for (PFOS-K, PFOS-NH4, PFOA-Na…)

The CAS for the GenX ammonium salt is CAS 62037-80-3
https://comptox.epa.gov/dashboard/dsstoxdb/results?utf8=%E2%9C%93&search=62037-80-3

The free acid for has the CAS 13252-13-6

Called undecafluoro-2-methyl-3-oxahexanoic acid
https://comptox.epa.gov/dashboard/dsstoxdb/results?utf8=%E2%9C%93&search=13252-13-6

Also per the brochure the "DuPont resin manufacturing process includes the thermal transformation of the GenX processing aid into a hydrophobic water-insoluble hydride (CAS Number 3330-15-2)". This is essentially the decarboxylation of the GenX acid. As this analyte is no longer an acid we do not see it. It is also more likely a GC amenable compound.
https://comptox.epa.gov/dashboard/dsstoxdb/results?utf8=%E2%9C%93&search=3330-15-2

2) Per the EPA sanitized PMN consent order it appears the 2 compounds are the free acid and ammonium salt form of the GenX compound (see attached)
3) The data from the Sun et al., 2016 paper is in the Science Hub (https://sciencehub.epa.gov/sciencehub/research_efforts/408/datasets/395)
4) Find attached the Sun et al., 2016 paper and the SI.

Please let me know if you have any further questions.
Mark

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